GE GE □□□ Series Service Manual

IS200HFPAG1ADC

1. Description

SPECIFICATIONS

3. Product Information

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Part No.: IS200HFPAG1ADC

Manufacturer: General Electric

Country of Manufacture: United States of America (USA)

Product Type: High-Frequency AC supply board

Availability: In Stock

Series: Drive Control

Functional Description

IS200HFPAG1ADC is a High Frequency AC supply board developed by GE. It is a part of Drive Control excitation system. The board stands as a crucial component within the system, designed to receive input voltage, whether in AC or DC form, and convert it into multiple output voltages. This conversion process is facilitated by various features and components integral to the board's functionality.

Input and Output Connectivity

Equipped with four stab-on connectors, the board caters to voltage inputs from both AC and DC sources. Additionally, it features eight plug connectors designated for output voltages, allowing efficient distribution of the converted voltages.

Protection and Status Indication

To safeguard the circuitry, the board integrates four onboard fuses. Furthermore, two LED indicators offer crucial updates on the status of the voltage outputs, facilitating continuous monitoring of the board's functionality.

Components and Thermal Management

A self-oscillating power supply inverter is among the key components, pivotal for the voltage conversion process. The board incorporates multiple heat sinks strategically placed to dissipate heat generated by the components, ensuring optimal operational conditions.

Identification and Configurability

The board is distinctly marked with its identification number, the GE logo, and codes aiding in wiring and location identification. However, it does not feature configurable hardware components.

Safety Measures for Replacement

Ensuring safety during replacement procedures, it is imperative to completely remove power from the drive for several minutes, allowing capacitors to discharge fully. Detailed instructions for installation or removal can be found in original manuals or data sheets provided by General Electric.

Input Connectors and Functionality

The four stab-on connectors on the board serve specific purposes, with ACF1 and ACF2 designated for isolated 230VAC inputs, while DCF1 and DCF2 cater to the positive and negative inputs from the DC link. Comprehensive information regarding the usage of these connectors can be found in associated manuals and user guides.

About the IS200HFPAG1ADC

The IS200HFPAG1ADC is a board component manufactured by GE for the Mark VI steam and gas turbine management system. The MKVI is one of the later systems released by General Electric in the Speedtronic line, which was developed by GE over nearly four decades. The Mark VI is built with the majority of control built within the primary control module. The Mark VI includes protection from overtemperature, over speed, and vibration, as well as automated control of startup, shutdown, temperature, and speed. Most data can be accessed through a connected PC (Windows-based) operator interface that runs proprietary software like the GE Control System Toolbox, and CIMPLICITY.

The IS200HFPAG1ADC functions within the Mark VI system as an AC/Fan Power Supply Board for High-Frequency applications. This is a multi-purpose board that may be installed in various locations within different cabinets of the drive. The IS200HFPAG1ADC is typically mounted in a plastic carrier near a fan enclosure or near a board rack. The IS200HFPAG1ADC has no configurable hardware.

The IS200HFPAG1ADC is built with two transformers, two heat sinks, and three high voltage capacitors. It has four fuses and a metal oxide varistor to protect the board’s circuitry. The board has four stab-on connectors and eight female plugs for the input and output of voltages. Two LED (light emitting diodes) are power indicators. The board has several transistors, as well as resistors and capacitors of various materials. More information on board components may be found within GE publication GEI-100255. Please follow all manufacturer guidelines and warnings.